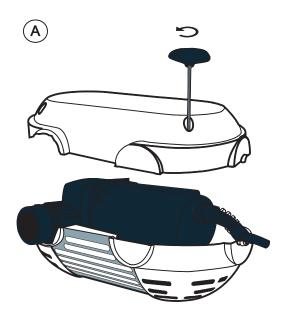
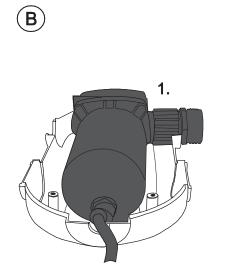
Operating Instructions UniTech Perfect

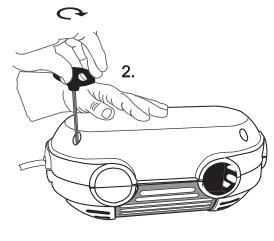


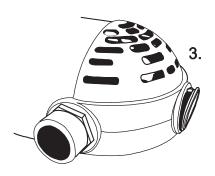
Technische Daten	Perfect 5000	Perfect 7000	Perfect 10000	Perfect 13000	Perfect 16000
Rated Voltage	230V/50Hz	230V/50Hz	230V/50Hz	230V/50Hz	230V/Hz
Power Consumption	49W	78W	105W	158W	200W
Max. flow rate	5100 l/h	7200 l/h	10100 l/h	12950 l/h	15900 l/h
Max. head height	1,85m	2,50m	3,50m	3,60m	4,50m
Cable	10m	10m	10m	10m	10m
Protection	IP X8				
Dimensions	105x230x125mm	105x230x125mm	105x230x125mm	105x265x125mm	105x265x125mm
Weight	3,2kg	3,2kg	3,2kg	4,2kg	4,2kg



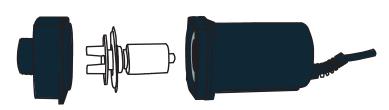












Used symbols at the type label

	IP X8	3,0 m	***	X	
explanation	Dust tight and submersible	Submersible to 3m depth	Must be removed at the first sign of frost	Do not dispose of together with household waste!	Attention! Read the operating instructions.



General Information

Thank you for deciding on a German quality product.

Please read the instructions for use carefully and make yourself familiar with the pump before initial installation. Be sure to read the safety information to ensure safe and correct use of your pump. Any work on this pump must only be carried out in accordance with these instructions.

The high-performance Perfect Pump is designed exclusively for conveying pond water for garden pond filters, water falls and water course systems with the water temperature between +4°C and +35°C. The pump must never be used with any fluid other than water. The Perfect Pump is designed to transport contaminants of up to 8 mm. It is fitted with an thermo control device that ensures that the pump shuts down automatically in case of overheating. The pump switches on automatically when power is connected (risk of accident). Please see the type plate for pump performance data. Inappropriate use and operation will void the liability of the manufacturer as soon as operating permit.

Scope of delivery

Perfect 5000 / 7000 and 10000 pump models

The 5000 / 7000 and 10000 pump models are supplied with 1 hose connection with an inside thread. The provided hose connection is reduced in stages and can accommodate hoses with a diameter of 32-40 mm. At the same time, an Allen key is provided that allows the pump housing to be opened if necessary.

13000 and 16000 pump models

The Perfect 13000 and 16000 pump models are supplied with 2 hose connections with an inside thread. Both hose connections are reduced in stages and can accommodate hoses with a diameter of 32-40 mm. A multi-function connection fitting and an allen key for opening the pump housing is provided.

CE Manufacturer's Declaration

We declare conformity as defined by the EU Directive EMU (89/336/EEC) and the Low Voltage Directive (2006/95/EU, 73/23/EEC). The following harmonised standards were applied:

EN 60335-1, EN 60335-2-41, EN 55014-2, EN 61000-3-2, EN 61000-3-3



Safety instruction

The manufacturer constructed this pump in accordance with the best available technology to the current safety regulations. In spite of this, hazards for humans and objects can emanate from this appliance if it is not used properly or as intended or if the safety information is not observed.

For safety reasons

Children, juveniles under the age of 16 and persons who are not able to recognise possible hazards or who are not familiar with the instructions for use must not use this appliance.

All work using this appliance must only be carried out in accordance with these instructions. Contact between water and electricity can lead to a life-threatening hazard in the case of improper handling or connections that are not in accordance with regulations. Only operate the appliance if there is nobody in the water.

Always remove all mains plugs on all appliances in the water before putting your hand into the water. Compare the electrical data of the power supply with the type plate on the appliance. Please ensure that the appliance is protected by a RCD with a maximum measured residual current of 30 mA (EN 61008-1).

Only operate the appliance from sockets that have been installed according to regulations and only use earthed fittings that are approved for outside use. Never carry or pull the appliance by the connecting cable (power cable). The connecting cable cannot be replaced as it is firmly encapsulated in the motor housing. The appliance must not be operated if the connections are faulty. Please dispose of the pump if the cable is damaged.

In the case of garden ponds the electric fittings must comply with the international and national installation regulations. Only use original spare parts and accessories. Never make technical alterations to the appliance. Never operate the pump without water.

Electrical connection

Only connect the pump to a 230 V alternating current. The socket must be fitted in accordance with national regulations. The mains plug and all electrical connecting parts must be dry. To protect the pump against excessive voltages, a 30 mA residual current circuit breaker must be fitted between the pump and the socket (according to EN 61008-1).

It is only permissible to use the pump in a garden pond and its safe area if the socket has been installed according to DIN VDE 0100, part 702. If there are any doubts in respect of the connection to the power supply, please consult a qualified local electrician.

Protect the pump cable from damage especially if there is the possibility of direct contact with gardening appliances such as lawn mowers or with children and pets. If an extension lead is required to connect the pump, please ensure that this has a protective ground contact and is approved for outside use. The same applies to fittings, cables or other connecting lines. All electric fittings on ponds must comply with the national and international installation regulations. A warranty claims are excluded following improper repair or opening of the pump by third parties. Likewise, liability will not be accepted for consequential damages. Only ever carry out work on the appliance when the power is off.

Overload protection

The pump is fitted with an automatic thermal overload protection. This switches off the pump if it overheats. If this occurs, switch off the power at the mains supply to the pump. Check for the cause. Usually it will be debris blocking the inlet of the pump or obstructing the impeller or limescale build up. Remove the cause and wait for the pump to cool down. Then switch on the pump again.

Installation

PLEASE NOTE The appliance must not suck in air or be operated without water flow. DANGER OF DESTRUCTION

- In order to avoid flow losses, only choose hoses with a large diameter and the hose length as short as possible. We recommend an inlet hose with a diameter of 40 mm. Cut the stepped hose tale at the notch intended especially for this.
- Place the pump on a firm subsurface in a horizontal and safe position. Uninstall the pump in case of frost. The pump must be at least 25cm under the water so that it does not suck in air.

Initial operation

PLEASE NOTE Hazardous electric voltage. Possible consequences: death or serious injuries (see safety information)

- Only operate the pump if nobody is in the water. Always remove the mains plugs on all appliances in the pond before putting your hand into the water
- The pump switches on automatically when power is connected.
- Remove the mains plug to shut down the pump.

Cleaning / maintenance

PLEASE NOTE Hazardous electric voltage. Possible consequences: death or serious injuries (see safety information) Always remove the mains plug before cleaning or carrying out maintenance work on the pump. Always remove the mains plugs on all appliances in the pond before putting your hand into the water.

The maintenance intervals depend on the degree of pond water contamination and/or water hardness. At the beginning check the function and contamination of the pump/rotor/rotor compartment every day. Later on, choose the time intervals accordingly.

We recommend maintenance and cleaning on a regular basis in order to ensure long-term flawless operation and to extend the service life of your pump. Dismantle the pump according to the disassembly drawings. Clean all parts under running water using a soft, lint-free cloth (e.g. leather). Check all parts for damage and replace them if necessary.

In the event that the rotor or the rotor compartment is affected by calcium or limescale deposits, use diluted acetic acid to dissolve the limescale. The time involved depends on the degree of calcination. To clean further, remove the rotor (Disassembly / Assembly) and clean the entire unit completely using fresh water and a soft, lint-free cloth (e.g. leather). The pump can be re-assembled in the reverse order once cleaning has been completed.

Disassembly / Assembly

- 1. Please observe the safety information. Disconnect pump from the mains.
- 2. Take the pump out of the water and open the housing by loosening the four stainless steel screws on the base of the housing using the Allen key included in the scope of delivery
- 3. Remove the pump and clean the housing
- Use the Allen key supplied with the delivery to loosen the 4 stainless steel screws on the front of the pump cover. Lift off the pump cover and remove the rotor.
- The pump can be re-assembled in reverse order after cleaning/maintenance has been completed.

PLEASE NOTE: Always remove the mains plug before cleaning or carrying out maintenance work on the pump. Always remove the mains plugs on all appliances in the pond before putting your hand into the water.

Troubleshooting:

Is the pump getting enough water?

Is the pond filter blocked?

Are hoses or nozzles blocked?

Has the pump rotor seized up (cleaning according to instructions)?

Has the pump cooled down?

Once you have remedied the problems, the pump can be put back into operation again.

Breakdowns	Cause	Remedy
Pump not running	No power supply Residual current circuit breaker triggered Pump rotor assembly jammed The thermal overload has tripped	Check power supply Check fuse box, RCD and wiring Remedy blockage or clean pump. See Instructions
Pump not conveying at all or only small quantity	Pump not deep enough under water Inlet blocked Air in the system Hose buckled Excessive flow resistance	Check pump water-level Check feed line, clean Check feed line Check hose Reduce/check hose length and use larger diameter hose

Storing in winter

As this pump range is fitted with a high-quality ceramic shaft, it has to be uninstalled in case of frost. Clean the pump thoroughly and store it in a frost-free place (at room temperature) in a container filled with water.

Disposal

Please dispose of the pump in accordance with the national regulations. Please consult your specialist dealer in this respect.

Warranty

As long as the Perfect Pump has been used properly as a pond pump, fitted and handled correctly and, as we see it, has not been vandalised, we provide a 5 year warranty as from purchase of the pump. Please keep the sales receipt, as this is proof for the warranty. At the same time, the attached warranty card should be completed by the dealer following purchase of the pump. Please keep this together with the sales receipt.

Damages due to faulty storage or installation and damages due to limescale are excluded from liability. Liability claims are restricted exclusively to the repair or replacement of a faulty pump. The warranty cannot be transferred to third parties. Statutory customer protection rights are not affected by this.

Warranty section (please complete and keep with the sales receipt)

pumpmodell: UniTech Perfect 5000 / 7000 / 10000 / 13000 / 16000 (pleas tick appropriate model)

Date of purchase	
Serial number	
Name/adress of specialized trade: (stamp)	